Portable hydration devices may be harmful

Portable hydration devices may do more harm than good when used in industrial areas where chemicals or hazardous materials are present.

When working in hot or stuffy climates, a time-tested method of having an ample supply of water is "to take it with you." Many people today often use portable, backpack-type devices.

Some workers, however, are using these portable hydrating devices in industrial areas to keep a ready supply of water at hand, but they could unknowingly be exposing themselves to health hazards, said Lt. Col. Robert Gargiulo, Air Force Materiel Command's chief occupational health engineer, following an April 20 assessment of potential dangers to people using these portable devices in areas where food and drink are prohibited.

"If you're somewhere you shouldn't be eating or drinking for sanitary or safety reasons, you apply the same rule to using hydration devices," said 1st Lt. Rob Wheeler, 8th Medical Group Bioenvironmental Engineering Flight deputy chief.

Each industrial shop or area with hazardous materials should have a bioenvironmental survey letter detailing the types of hazards that would prevent safe use of hydration packs, said Wheeler. These include chemical fumes, vapors, particulates, and situations where liquid chemicals have the potential to splash "Portable hydration devices are convenient for the worker in that they don't have to lose productivity... But the potential for getting sick down the road outweighs that convenience."

> Master Sgt. Rick Johnson NCO-in-charge of Air Force Materiel Command's Bioenvironmental Engineering Section.

onto the bite valve.

While the popular devices, such as the "Camelbak," are useful in hot, arid climates or on flightlines and in the field, Gargiulo said portable hydrating devices can cause problems for those working in areas where painting, sanding, metal grinding, and mixing chemicals and pesticides occur. He also said it applies to areas where particles or vapors can be ingested.

"Many industrial areas use chemicals or materials which present a health hazard if swallowed or ingested," Gargiulo said. "Since hydration devices have a rubber-end mouthpiece that has to be chewed or bit open, there is a significant chance for transferring the chemicals to the mouth.

"Additionally, dusts can collect on the wet mouthpiece and chemical vapors can absorb into the rubber. You don't want to swallow these materials or you could get sick — either now or over time."

Current Occupational Safety and

Health Administration and Air Force regulations prohibit food and drink in areas where potential ingestion hazards exist, Gargiulo said. Also, workers should wash their hands before eating, drinking or smoking after working in an area with ingestion hazards.

"These regulations are geared toward protecting our people," he said. "Compliance is mandatory with these federal standards."

"That's why people need to coordinate with their base safety and bioenvironmental engineering offices before using [portable hydrating devices], so the experts can look at your area and let you know whether or not [the devices] are suitable for your work area," said Gargiulo.

Another concern with these and any other portable devices is that loose straps or ties could become a safety hazard if they get caught in equipment or on obstructions. Being pulled into a piece of equipment could cause severe injuries or

even death.

Bill Fannin, of the AFMC safety office, said that although there are few reports of injuries resulting from loose clothing or personal equipment, the potential for injury exists. "It's not that we want to prohibit these devices, our users just need to observe some basic safety and health precautions," he said.

Everyone working in hot or arid climates should drink a lot of fluids when exerting themselves, said Master Sgt. Rick Johnson, non-commissioned officer in charge of AFMC's bioenvironmental engineering section. The proper amount of fluids can help prevent heat cramps, heat sickness or heat stroke. Workers should also take breaks every couple of hours to make sure they do not overheat.

"Portable hydration devices are convenient for the worker in that they don't have to lose productivity by leaving their work station, going to the water fountain, getting a drink and coming back," he said. "But the potential for getting sick down the road outweighs that convenience."

"The Wolf Pack bioenvironmental flight will look at specific areas on base to determine if the use of portable hydration packs is safe when requested," said Wheeler.

For more information, call the Bioenvironmental Flight at 782-4670. (Courtesy of AFMC News Service)

Candles: Second leading cause of dormitory fires can be prevented

By Tech. Sgt. Brett Galeener 8th Civil Engineer Squadron

According to base policy and 8th Fighter Wing Instruction, 32-2001 3.11, it is illegal to have candles in your dorm room. So why did a candle in a dorm room cause a fire this past January?

Most people don't realize candles are the second largest cause of fire hazards in dormitories across the United States.

It's very easy to disregard policies on candles, many personnel believe that the jar or dish they use will keep the candle safe. However, this is a fallacy. All it takes is forgetting to blow out your candle or knocking it over once.

Military personnel should know if caught in violation of this directive they could be charged under Article 92 of the UCMJ (disobeying a direct order).

Fire prevention is the combined effort of all personnel. If someone has a candle in their room, it is everyone's responsibility to tell them to remove it.

remove it.
Candles
are the cause
of approxi-

mately 800 fires in dormitories across the U.S. mainly due to occupant neglect. There is about 59 million dollars worth of damage a year due to candle fires throughout the U.S. We were lucky that there was no one injured in January's dorm fire since there are about 87 deaths a year due to fires in dormitories each year. Therefore, think of other ways to make your dorm look

and smell better, such as carpet deodorizer, air freshener, plants, etc.

Remember, candles in dormitories are against base policies and present a fire hazard as well as a life-endangering situation. Working together, we can lower the risk of dormitory fires, by simply obeying and enforcing the base policy.



Job: 8th Services Squadron fitness center director

Hometown: Bronx, N.Y.

Follow-on: McGuire Air Force Base, N.J. **Family:** 10-year-old daughter Heather

Hobbies: Weightlifting, sports and playing "Madden 2001"

on Playstation

Words of wisdom: "Let go of your obsession to win and you will be victorious."

The Pride of the Pack is nominated by his or her commander, first sergeant or supervisor, or any Wolf Pack member, for outstanding value to their unit and dedication to the mission. To nominate a Wolf Pack member, send a nomination to the individual's group commander.



Tech. Sgt. Torrence Mills